Application No. 09/767,463 Amendment in Response to July 22, 2003 Office Action Docket No. 7227-253

REMARKS

- 3. Claims 9-12, 14-16 and 25 are rejected under 35 U.S.C. 102(e) as being anticipated by Swarup (US 5,929,729) hereinafter '729.

 As applied to claim 9, the '729 teaches a method of making stripline circuit structure, comprising:
- manufacturing a plurality of substrate layers (Cf Fig. 6B, elements 192, 204, 208, 212);
- etching at least five metal layers (Cf. Fig. 6B, elements 202, 198, 194, 190, 206) disposed on several substrate layers (Cf. Fig. 6B, elements 192, 204,1208, 212); wherein second metal layer (element 210) is part of transmission line coupler and sandwiched between first metal layer (element 214) and 3rd metal one (element 206); wherein 4th metal layer (element 190) is part of transmission line coupler and sandwiched between 3rd metal layer (element 206) and 5th metal one (element 194);
- connecting via hole (element 160) all the 1st, 3rd, 5th layers of groundplane (elements 214, 206 & 194);
- connecting via hole (Cf. Fig. 6B, elements 160; column 11, lines 62-65) the coupler segment disposed on second metal layer (element 210) to the coupler segment disposed on 4th metal layer (element 160) forming transmission line structure.

The Examiner, in his comments, asserts that elements 210 and 190 of Swarup are each a part of the transmission line coupler as recited in claim 9. This is not correct. Nowhere does the '729 patent teach or suggest that elements 210 and 190 are segments of a transmission line couplers as recited in claim 9 of the present application.

What Swarup teaches is lumped elements within a multi-layer "stripline" architecture. These lumped elements are in a stripline architecture because they are located between a top and bottom groundplane. This does not make them stripline transmission line couplers. The mathematics that govern the distributed elements in Swarup are completely different from those that govern the distributed transmission line couplers claimed in the present invention. In short, Swarup's teaching of lumpled elements in a stripline architecture does not disclose or suggest stripline transmission line couplers. Although the terminology may seem similar, it is understood in the art that the two are simply not the same. If the Examiner does not fully understand and appreciate this difference, then the undersigned requests a telephone conference with the Examiner in which the inventors of the present application will more fully explain the differences between Swarup's stripline architecture and the claimed stripline transmission line couplers.

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Furthermore, what the '729 patent states is that element 190 is a "signal carrying metal layer 190, in which the printed lumped elements are formed..." ('729 col. 11, 1. 52). This disclosure (as well as the more complete disclosure found at col. 11 line 39 through col. 12 line 22 of the '729 patent) is not the disclosure of "part of a segment of said transmission line coupler" as recited in claim 9 of the present application. The '729 patent's disclosure says much less – i.e., that the function is merely signal carrying. Transmission line signal coupling by element 190 is not suggested. If the Examiner maintains his view that element 190 is part of a transmission line coupler (in spite of the fact that the '729 patent does not state or suggest that it operates as such), the undersigned request that the Examiner provide objective evidence of this function and cite to specific disclosure in the '729 patent that element 190 is part of a transmission line coupler.

The '729 patent further states that element 210 is one of "two elemental metal layers 210 ..." ('729, col. 11, l. 67-col. 12, l. 1) and that the purpose of element 210 "is to provide additional circuit elements outside the plane of the signal carrying layer 190. In the example of FIG. 6B, additional capacitors are printed and etched into the element layers 198 and 210. These capacitors are connected in parallel with the interdigital capacitors 38, 40, 46, 48 formed in the signal carrying layer 190 to provide additional capacitance in a smaller surface area. These capacitors in the elemental layers 198, 210 are connected to the capacitors in the signal carrying layer 190 using plated through via holes, as shown."

As for element 190, this disclosure of element 210 (as well as the more complete disclosure found at col. 11 line 39 through col. 12 line 22 of the '729 patent) is not the disclosure of "part of a segment of said transmission line coupler" as recited in claim 9 of the present application. The '729 patent's disclosure says much less – i.e., that the function of element 210 is merely as a layer in which circuit elements, such as capacitors, may be formed. Transmission line signal coupling by element 210 is not suggested. If the Examiner maintains his view that element 210 is part of a transmission line coupler (in spite of the fact that the '729 patent does not state or

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suggest that it operates as such), the undersigned request that the Examiner provide objective evidence of this function and cite to specific disclosure in the '729 patent that element 210 is part of a transmission line coupler.

The undersigned suggest that the examiner review the disclosure found at col. 11 line 39 through col. 12 line 22 of the '729 patent for a more complete explanation of elemnts 190 and 210.

Because the '729 patent does not teach or suggest that either element 190 or element 210 of the '729 patent is part of a transmission line coupler, the examiner's rejection of claim 9 as anticipated under 35 USC 102(e) is not supported. The undersigned respectfully request that the Examiner withdraw his rejection of claim 9 and allow the claims.

Claims 10-16 and 25 each depend, directly or indirectly, from claim 9 and are patentable over Swarup for at least the reasons stated with respect to claim 9.

Conclusion

Claims 9-16 and 25 are now pending and believed to be in condition for allowance. Applicant respectfully requests that all pending claims be allowed.

Please apply any credits or excess charges to our deposit account number 50-0521.

Respectfully submitted,

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Date: October 21, 2003

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